STIC-Biotech/ChemLib 142072 mg

From: Chan, Christina
Sent: Monday, January 10, 2005 10:48 AM
To: Murphy, Joseph; STIC-Biotech/ChemLib
Subject: RE: 10037922

Please rush. Thanks Chris

Chris Chan
TC 1600 New Hire Training Coordinator and SPE 1644
(571)-272-0841
Remsen, 3E89

-----Original Message-----
From: Murphy, Joseph
Sent: Monday, January 10, 2005 10:23 AM
To: Chan, Christina
Subject: 10037922

Hi Christina,

Please authorize a RUSH search of this case, it is an Amended.

Thanks,

- Joe

STIC/Biotech:

Please search SEQ ID NO: 2 against protein databases.

Please do an oligo search of SEQ ID NO: 2.

Please do an interference search of SEQ ID NO: 2

Please send the results on DISK.

Thanks a lot...

Joseph F. Murphy, Ph.D.
Patent Examiner, Art Unit 1646
joseph.murphy@uspto.gov
Remsen 4D78
Mailbox: 4C70
(571) 272-0877

****
STAFF USE ONLY

Searcher:_____
Searcher Phone: 2-
Date Searcher Picked up:_____
Date Completed: 1-12-05
Searcher Prep/Rev. Time:___
Online Time:_____

****
Type of Search
NA Sequence: #_____
AA Sequence :#_____
Structure: #_____
Bibliographic:_____
Litigation:_____
Patent Family:_____
Other:_____

****
Vendors and cost where applicable
STN:_____
DIALOG:_____
QUESTEL/ORBIT:_____
LEXIS/NEXIS:_____
SEQUENCE SYSTEM:_____
WWW/Internet:_____
Other(Specify):_____

10037922 Results
SEQ ID NO: 2

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1097	100.0	207	2	AAW57413	Aaw57413 Amino aci
2	1097	100.0	207	2	AAY08590	Aay08590 Human FGF
3	1097	100.0	207	2	AAY39628	Aay39628 Human fib
4	1097	100.0	207	3	AAY56817	Aay56817 Human fib
5	1097	100.0	207	3	AAY87857	Aay87857 Human FGF
6	1097	100.0	207	3	AAY44844	Aay44844 Human hea
7	1097	100.0	207	4	AAE04536	Aae04536 Human fib
8	1097	100.0	207	4	AAU01240	Aau01240 Human fib
9	1097	100.0	207	4	AAG65664	Aag65664 Human fib
10	1097	100.0	207	4	AAB85827	Aab85827 Human fib
11	1097	100.0	207	5	AAE18823	Aae18823 Human FGF
12	1097	100.0	207	6	ABG74159	Abg74159 Human fib
13	1097	100.0	207	6	ABG72718	Abg72718 Recombina
14	1097	100.0	207	7	ADA44887	Ada44887 Human hea
15	1097	100.0	207	7	ADF17708	Adf17708 Human fib
16	1097	100.0	207	7	ABW02394	Abw02394 Human zFG
17	1097	100.0	207	7	ADM30842	Adm30842 Human fib
18	1097	100.0	207	8	ADM94763	Adm94763 Human fib
19	1097	100.0	207	8	ADO49085	Ado49085 Human ded
20	1085	98.9	207	6	ABU63392	Abu63392 Human fib
21	1081	98.5	207	3	AAY56819	Aay56819 Mouse fib
22	1081	98.5	207	3	AAY56818	Aay56818 Rat fibro
23	1081	98.5	207	4	AAE04537	Aae04537 Mouse fib

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1097	100.0	207	2	US-08-951-822-2	Sequence 2, Appli
2	1097	100.0	207	3	US-09-173-043-25	Sequence 25, Appl
3	1097	100.0	207	3	US-09-368-951-2	Sequence 2, Appli
4	1097	100.0	207	4	US-09-417-721-14	Sequence 14, Appl
5	1097	100.0	207	4	US-09-229-947-2	Sequence 2, Appli
6	1097	100.0	207	4	US-09-658-644-8	Sequence 8, Appli
7	1081	98.5	207	4	US-09-229-947-39	Sequence 39, Appl
8	932	85.0	193	4	US-09-658-644-6	Sequence 6, Appli
9	596	54.3	215	1	US-08-439-725A-6	Sequence 6, Appli
10	596	54.3	215	2	US-08-867-471-6	Sequence 6, Appli
11	596	54.3	215	2	US-08-438-439C-6	Sequence 6, Appli
12	596	54.3	215	3	US-08-705-245-17	Sequence 17, Appl
13	596	54.3	215	4	US-09-490-714-17	Sequence 17, Appl
14	591	53.9	215	1	US-08-462-169B-16	Sequence 16, Appl
15	591	53.9	215	3	US-09-103-079-16	Sequence 16, Appl
16	591	53.9	215	3	US-08-718-904-17	Sequence 17, Appl
17	591	53.9	215	3	US-09-057-860A-4	Sequence 4, Appli
18	591	53.9	215	4	US-09-425-021-16	Sequence 16, Appl
19	591	53.9	215	4	US-09-449-249-17	Sequence 17, Appl
20	591	53.9	215	4	US-09-564-829-10	Sequence 10, Appl
21	571	52.1	212	3	US-09-036-985A-2	Sequence 2, Appli
22	567.5	51.7	205	4	US-09-907-794A-23	Sequence 23, Appl

RESULT 1
US-08-951-822-2
; Sequence 2, Application US/08951822A
; Patent No. 5989866
; GENERAL INFORMATION:
; APPLICANT: Deisher, Theresa A.

; APPLICANT: Conklin, Darrell C.
; APPLICANT: Raymond, Fenella
; APPLICANT: Bukowski, Thomas R.
; APPLICANT: Holderman, Susan D.
; APPLICANT: Hansen, Birgit
; APPLICANT: Sheppard, Paul O.
; TITLE OF INVENTION: NOVEL FGF HOMOLOGS
; FILE REFERENCE: 96-20
; CURRENT APPLICATION NUMBER: US/08/951,822A
; CURRENT FILING DATE: 1997-10-16
; NUMBER OF SEQ ID NOS: 36
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 2
;   LENGTH: 207
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-08-951-822-2

  Query Match   100.0%; Score 1097; DB 2; Length 207;
  Best Local Similarity   100.0%; Pred. No. 1.7e-119;
  Matches 207; Conservative   0; Mismatches   0; Indels   0; Gaps   0;

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	591	53.9	215	2	G02092	fibroblast growth
2	591	53.9	215	2	A46245	fibroblast growth
3	566	51.6	216	2	JC5972	fibroblast growth
4	194	17.7	194	1	A36301	fibroblast growth
5	193	17.6	194	2	S49501	keratinocyte growt
6	193	17.6	194	2	I48610	keratinocyte growt
7	190	17.3	194	2	S26049	fibroblast growth
8	190	17.3	413	2	H88481	protein let-756 [i
9	181	16.5	208	2	JC7082	fibroblast somatot
10	172	15.7	194	2	I50710	fibroblast growth
11	172	15.7	208	2	S66486	fibroblast growth
12	172	15.7	208	2	A48137	fibroblast growth
13	171.5	15.6	155	2	D37360	acidic fibroblast
14	171.5	15.6	155	2	S04147	acidic fibroblast
15	170.5	15.5	206	1	TVHUHS	fibroblast growth
16	169.5	15.5	155	1	A60721	acidic fibroblast
17	168.5	15.4	152	2	JH0476	acidic fibroblast
18	167.5	15.3	155	2	JW0055	acidic fiblobrast

RESULT 1
G02092
fibroblast growth factor 8 precursor - human
N;Alternate names: androgen-induced growth factor
N;Contains: fibroblast growth factor 8, splice form A
C;Species: Homo sapiens (man)
C;Date: 21-Dec-1996 #sequence_revision 06-Jun-1997 #text_change 31-Mar-2000
C;Accession: G02092; S65653; G02394
R;Chiu, I.
submitted to the EMBL Data Library, September 1995
A;Reference number: H00790
A;Accession: G02092
A;Status: translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-215 <CHI>
A;Cross-references: EMBL:U36223; NID:g1143261; PID:g1143262
R;Tanaka, A.; Miyamoto, K.; Matsuo, H.; Matsumoto, K.; Yoshida, H.
FEBS Lett. 363, 226-230, 1995
A;Title: Human androgen-induced growth factor in prostate and breast cancer cells: its
molecular cloning and growth properties.
A;Reference number: S65653; MUID:95255551; PMID:7737407
A;Accession: S65653
A;Status: preliminary

```
A;Molecule type: DNA; mRNA
A;Residues: 1-215 <TAN>
A;Cross-references: EMBL:S78465; EMBL:S78466; NID:g999171; PID:g999172; GB:D38752;
NID:g2463547; PID:d1023395; PID:g2463548
R;Roy-Burman, P.
submitted to the EMBL Data Library, January 1996
A;Reference number: H01168
A;Accession: G02394
A;Status: translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-23,35-215 <ROY>
A;Cross-references: EMBL:U46211; NID:g1184864; PID:g1184865
C;Genetics:
A;Gene: GDB:FGF8; AIGF
A;Cross-references: GDB:591889; OMIM:600483
A;Map position: 10q25-10q26
C;Keywords: alternative splicing; blocked amino end; pyroglutamic acid
F;1-22/Domain: signal sequence #status predicted <SIG>
F;23-215/Product: fibroblast growth factor 8 #status predicted <MAT>
F;23,35-215/Product: fibroblast growth factor 8, splice form A #status predicted <MATA>
F;23/Modified site: pyrrolidone carboxylic acid (Gln) (in mature form) #status predicted

  Query Match             53.9%;  Score 591;  DB 2;  Length 215;
  Best Local Similarity   57.3%;  Pred. No. 1.9e-44;
  Matches  110;  Conservative   35;  Mismatches   45;  Indels    2;  Gaps    2;

Qy          1 MYSAPSACTCLCLHFLLLCFQVQVLVAEENVDFRIHVENQTRARDDVSRKQLRLYQLYSR 60
              | |  || :|| || |:|| | || | : : :|  ||  |:   | :||: :| ||||||
Db          1 MGSPRSALSCLLLHLLVLCLQAQVTV-QSSPNFTQHVREQSLVTDQLSRRLIRTYQLYSR 59

Qy         61 TSGKHIQVL-GRRISARGEDGDKYAQLLVETDTFGSQVRIKGKETEFYLCMNRKGKLVGK 119
              |||||:|||  :||:|  |||| :|:|:|||||||:||::| ||  |:|||:||||: |
Db         60 TSGKHVQVLANKRINAMAEDGDPFAKLIVETDTFGSRVRVRGAETGLYICMNKKGKLIAK 119

Qy        120 PDGTSKECVFIEKVLENNYTALMSAKYSGWYVGFTKKGRPRKGPKTRENQQDVHFMKRYP 179
               :|  |:||| | ||||||||| :||| |||: ||:|||||| |||::|::|||||| |
Db        120 SNGKGKDCVFTEIVLENNYTALQNAKYEGWYMAFTRKGRPRKGSKTRQHQREVHFMKRLP 179

Qy        180 KGQPELQKPFKY 191
              :|    ::  ::
Db        180 RGHHTTEQSLRF 191


                                    SUMMARIES

                  %
Result            Query
  No.    Score    Match  Length  DB  ID                      Description
 ------------------------------------------------------------------------
     1     1097  100.0     207   1  FGFI_HUMAN              O76093 homo sapien
     2     1081   98.5     207   1  FGFI_MOUSE              O89101 mus musculu
     3     1081   98.5     207   1  FGFI_RAT                O88182 rattus norv
     4     1042   95.0     207   2  Q9I950                  Q9i950 gallus gall
     5      817   74.5     156   2  Q6UWF1                  Q6uwf1 homo sapien
     6      817   74.5     156   2  AAQ89954                Aaq89954 homo sapi
     7    713.5   65.0     185   2  Q7T2N7                  Q7t2n7 brachydanio
     8    690.5   62.9     208   2  Q7SX66                  Q7sx66 brachydanio
     9      591   53.9     197   2  Q8HZT4                  Q8hzt4 oryctolagus
    10      583   53.1     210   2  O57341                  O57341 brachydanio
    11      578   52.7     208   2  Q90XQ4                  Q90xq4 ambystoma m
    12      578   52.7     212   2  Q9DE51                  Q9de51 ambystoma m
    13      576   52.5     210   2  O42278                  O42278 brachydanio
    14    574.5   52.4     204   2  Q76LI5                  Q76li5 rattus norv
    15    574.5   52.4     204   2  BAB84359                Bab84359 rattus no
    16      574   52.3     204   2  Q90696                  Q90696 gallus gall
    17      574   52.3     214   1  FGF8_CHICK              Q90722 gallus gall
    18      571   52.1     216   1  FGFH_HUMAN              O60258 homo sapien
    19      571   52.1     216   2  AAH69475                Aah69475 homo sapi

RESULT 1
FGFI_HUMAN
ID   FGFI_HUMAN     STANDARD;      PRT;   207 AA.
```

```
AC   O76093;
DT   15-JUL-1999 (Rel. 38, Created)
DT   15-JUL-1999 (Rel. 38, Last sequence update)
DT   05-JUL-2004 (Rel. 44, Last annotation update)
DE   Fibroblast growth factor-18 precursor (FGF-18) (zFGF5).
GN   Name=FGF18;
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=98414622; PubMed=9742123;
RA   Hu M.C.-T., Qiu W.R., Wang Y.-P., Hill D., Ring B.D., Scully S.,
RA   Bolon B., Derose M., Luethy R., Simonet W.S., Arakawa T.,
RA   Danilenko D.M.;
RT   "FGF-18, a novel member of the fibroblast growth factor family,
RT   stimulates hepatic and intestinal proliferation.";
RL   Mol. Cell. Biol. 18:6063-6074(1998).
RN   [2]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Lung;
RX   MEDLINE=98325019; PubMed=9660775;
RA   Ohbayashi N., Hoshikawa M., Kimura S., Yamasaki M., Fukui S., Ito N.;
RT   "Structure and expression of the mRNA encoding a novel fibroblast
RT   growth factor, FGF-18.";
RL   J. Biol. Chem. 273:18161-18164(1998).
RN   [3]
RP   SEQUENCE FROM N.A.
RA   Deisher T., Conklin D., Raymond F., Bukowski T., Holderman S.,
RA   Hansen B., Sheppard P., O'Hara P.;
RT   "Homo sapiens homologue of fibroblast growth factor.";
RL   Submitted (DEC-1999) to the EMBL/GenBank/DDBJ databases.
RN   [4]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Ovary;
RX   MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA   Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA   Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA   Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA   Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA   Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA   Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA   Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA   Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA   Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA   Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA   Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA   Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA   Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA   Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA   Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA   Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RA   Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT   "Generation and initial analysis of more than 15,000 full-length human
RT   and mouse cDNA sequences.";
RL   Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
CC   -!- FUNCTION: Stimulates hepatic and intestinal proliferation.
CC   -!- SUBCELLULAR LOCATION: Secreted (By similarity).
CC   -!- SIMILARITY: Belongs to the heparin-binding growth factors family.
CC   ---------------------------------------------------------------------
CC   This SWISS-PROT entry is copyright. It is produced through a collaboration
CC   between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC   the European Bioinformatics Institute. There are no restrictions on its
CC   use by non-profit institutions as long as its content is in no way
CC   modified and this statement is not removed. Usage by and for commercial
CC   entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC   or send an email to license@isb-sib.ch).
CC   ---------------------------------------------------------------------
DR   EMBL; AF075292; AAC62240.1; -.
DR   EMBL; AB007422; BAA31986.1; -.
```

```
DR   EMBL; AF211188; AAF22977.1; -.
DR   EMBL; BC006245; AAH06245.1; -.
DR   HSSP; P31371; 1G82.
DR   Genew; HGNC:3674; FGF18.
DR   MIM; 603726; -.
DR   GO; GO:0005615; C:extracellular space; TAS.
DR   GO; GO:0008083; F:growth factor activity; TAS.
DR   GO; GO:0007267; P:cell-cell signaling; TAS.
DR   GO; GO:0009653; P:morphogenesis; TAS.
DR   GO; GO:0008284; P:positive regulation of cell proliferation; TAS.
DR   GO; GO:0007165; P:signal transduction; TAS.
DR   InterPro; IPR008996; Cytok_IL1_like.
DR   InterPro; IPR002348; IL1_HBGF.
DR   Pfam; PF00167; FGF; 1.
DR   PRINTS; PR00262; IL1HBGF.
DR   ProDom; PD000831; IL1_HBGF; 1.
DR   SMART; SM00442; FGF; 1.
DR   PROSITE; PS00247; HBGF_FGF; 1.
KW   Glycoprotein; Growth factor; Signal.
FT   SIGNAL        1     27       Potential.
FT   CHAIN        28    207       Fibroblast growth factor-18.
FT   CARBOHYD     39     39       N-linked (GlcNAc. . .) (Potential).
FT   CARBOHYD    137    137       N-linked (GlcNAc. . .) (Potential).
SQ   SEQUENCE   207 AA;  23989 MW;  57F69E7B30181500 CRC64;

  Query Match             100.0%;  Score 1097;  DB 1;  Length 207;
  Best Local Similarity   100.0%;  Pred. No. 5.7e-94;
  Matches  207;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MYSAPSACTCLCLHFLLLCFQVQVLVAEENVDFRIHVENQTRARDDVSRKQLRLYQLYSR 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MYSAPSACTCLCLHFLLLCFQVQVLVAEENVDFRIHVENQTRARDDVSRKQLRLYQLYSR 60

Qy         61 TSGKHIQVLGRRISARGEDGDKYAQLLVETDTFGSQVRIKGKETEFYLCMNRKGKLVGKP 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 TSGKHIQVLGRRISARGEDGDKYAQLLVETDTFGSQVRIKGKETEFYLCMNRKGKLVGKP 120

Qy        121 DGTSKECVFIEKVLENNYTALMSAKYSGWYVGFTKKGRPRKGPKTRENQQDVHFMKRYPK 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 DGTSKECVFIEKVLENNYTALMSAKYSGWYVGFTKKGRPRKGPKTRENQQDVHFMKRYPK 180

Qy        181 GQPELQKPFKYTTVTKRSRRIRPTHPA 207
              |||||||||||||||||||||||||||
Db        181 GQPELQKPFKYTTVTKRSRRIRPTHPA 207
```

Oligo Search:

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1097	100.0	207	2	AAW57413	Aaw57413 Amino aci
2	1097	100.0	207	2	AAY08590	Aay08590 Human FGF
3	1097	100.0	207	2	AAY39628	Aay39628 Human fib
4	1097	100.0	207	3	AAY56817	Aay56817 Human fib
5	1097	100.0	207	3	AAY87857	Aay87857 Human FGF
6	1097	100.0	207	3	AAY44844	Aay44844 Human hea
7	1097	100.0	207	4	AAE04536	Aae04536 Human fib
8	1097	100.0	207	4	AAU01240	Aau01240 Human fib
9	1097	100.0	207	4	AAG65664	Aag65664 Human fib
10	1097	100.0	207	4	AAB85827	Aab85827 Human fib
11	1097	100.0	207	5	AAE18823	Aae18823 Human FGF
12	1097	100.0	207	6	ABG74159	Abg74159 Human fib
13	1097	100.0	207	6	ABG72718	Abg72718 Recombina
14	1097	100.0	207	7	ADA44887	Ada44887 Human hea
15	1097	100.0	207	7	ADF17708	Adf17708 Human fib
16	1097	100.0	207	7	ABW02394	Abw02394 Human zFG
17	1097	100.0	207	7	ADM30842	Adm30842 Human fib
18	1097	100.0	207	8	ADM94763	Adm94763 Human fib

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1097	100.0	207	2	US-08-951-822-2	Sequence 2, Appli
2	1097	100.0	207	3	US-09-173-043-25	Sequence 25, Appl
3	1097	100.0	207	3	US-09-368-951-2	Sequence 2, Appli
4	1097	100.0	207	4	US-09-417-721-14	Sequence 14, Appl
5	1097	100.0	207	4	US-09-229-947-2	Sequence 2, Appli
6	1097	100.0	207	4	US-09-658-644-8	Sequence 8, Appli
7	1081	98.5	207	4	US-09-229-947-39	Sequence 39, Appl
8	932	85.0	193	4	US-09-658-644-6	Sequence 6, Appli
9	596	54.3	215	1	US-08-439-725A-6	Sequence 6, Appli
10	596	54.3	215	2	US-08-867-471-6	Sequence 6, Appli
11	596	54.3	215	2	US-08-438-439C-6	Sequence 6, Appli
12	596	54.3	215	3	US-08-705-245-17	Sequence 17, Appl
13	596	54.3	215	4	US-09-490-714-17	Sequence 17, Appl
14	591	53.9	215	1	US-08-462-169B-16	Sequence 16, Appl
15	591	53.9	215	3	US-09-103-079-16	Sequence 16, Appl
16	591	53.9	215	3	US-08-718-904-17	Sequence 17, Appl
17	591	53.9	215	3	US-09-057-860A-4	Sequence 4, Appli
18	591	53.9	215	4	US-09-425-021-16	Sequence 16, Appl
19	591	53.9	215	4	US-09-449-249-17	Sequence 17, Appl
20	591	53.9	215	4	US-09-564-829-10	Sequence 10, Appl
21	571	52.1	212	3	US-09-036-985A-2	Sequence 2, Appli
22	567.5	51.7	205	4	US-09-907-794A-23	Sequence 23, Appl

```
RESULT 1
US-08-951-822-2
; Sequence 2, Application US/08951822A
; Patent No. 5989866
; GENERAL INFORMATION:
;  APPLICANT: Deisher, Theresa A.
;  APPLICANT: Conklin, Darrell C.
;  APPLICANT: Raymond, Fenella
;  APPLICANT: Bukowski, Thomas R.
;  APPLICANT: Holderman, Susan D.
;  APPLICANT: Hansen, Birgit
;  APPLICANT: Sheppard, Paul O.
;  TITLE OF INVENTION: NOVEL FGF HOMOLOGS
;  FILE REFERENCE: 96-20
;  CURRENT APPLICATION NUMBER: US/08/951,822A
;  CURRENT FILING DATE: 1997-10-16
;  NUMBER OF SEQ ID NOS: 36
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 2
;   LENGTH: 207
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-08-951-822-2

  Query Match             100.0%;  Score 1097;  DB 2;  Length 207;
  Best Local Similarity   100.0%;  Pred. No. 1.7e-119;
  Matches  207;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
```

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	591	53.9	215	2	G02092	fibroblast growth
2	591	53.9	215	2	A46245	fibroblast growth
3	566	51.6	216	2	JC5972	fibroblast growth
4	194	17.7	194	1	A36301	fibroblast growth
5	193	17.6	194	2	S49501	keratinocyte growt
6	193	17.6	194	2	I48610	keratinocyte growt

7	190	17.3	194	2	S26049	fibroblast growth
8	190	17.3	413	2	H88481	protein let-756 [i
9	181	16.5	208	2	JC7082	fibroblast somatot
10	172	15.7	194	2	I50710	fibroblast growth
11	172	15.7	208	2	S66486	fibroblast growth
12	172	15.7	208	2	A48137	fibroblast growth
13	171.5	15.6	155	2	D37360	acidic fibroblast
14	171.5	15.6	155	2	S04147	acidic fibroblast
15	170.5	15.5	206	1	TVHUHS	fibroblast growth
16	169.5	15.5	155	1	A60721	acidic fibroblast
17	168.5	15.4	152	2	JH0476	acidic fibroblast
18	167.5	15.3	155	2	JW0055	acidic fiblobrast
19	167.5	15.3	192	2	S54407	embryonic fibrobla
20	166.5	15.2	155	1	A33665	acidic fibroblast
21	164	14.9	211	2	JC7353	fibroblast growth
22	164	14.9	212	2	JC7511	fibroblast growth
23	163.5	14.9	97	2	B46289	keratinocyte growt

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1097	100.0	207	1	FGFI_HUMAN	O76093 homo sapien
2	1081	98.5	207	1	FGFI_MOUSE	O89101 mus musculu
3	1081	98.5	207	1	FGFI_RAT	O88182 rattus norv
4	1042	95.0	207	2	Q9I950	Q9i950 gallus gall
5	817	74.5	156	2	Q6UWF1	Q6uwf1 homo sapien
6	817	74.5	156	2	AAQ89954	Aaq89954 homo sapi
7	713.5	65.0	185	2	Q7T2N7	Q7t2n7 brachydanio
8	690.5	62.9	208	2	Q7SX66	Q7sx66 brachydanio
9	591	53.9	197	2	Q8HZT4	Q8hzt4 oryctolagus
10	583	53.1	210	2	O57341	O57341 brachydanio
11	578	52.7	208	2	Q90XQ4	Q90xq4 ambystoma m
12	578	52.7	212	2	Q9DE51	Q9de51 ambystoma m
13	576	52.5	210	2	O42278	O42278 brachydanio
14	574.5	52.4	204	2	Q76LI5	Q76li5 rattus norv
15	574.5	52.4	204	2	BAB84359	Bab84359 rattus no
16	574	52.3	204	2	Q90696	Q90696 gallus gall
17	574	52.3	214	1	FGF8_CHICK	Q90722 gallus gall
18	571	52.1	216	1	FGFH_HUMAN	O60258 homo sapien
19	571	52.1	216	2	AAH69475	Aah69475 homo sapi
20	570	52.0	211	2	Q8AXC5	Q8axc5 xenopus lae

Connecting via Winsock to STN

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspta1649jxm

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	SEP 01	New pricing for the Save Answers for SciFinder Wizard within STN Express with Discover!
NEWS	4	OCT 28	KOREAPAT now available on STN
NEWS	5	NOV 30	PHAR reloaded with additional data
NEWS	6	DEC 01	LISA now available on STN
NEWS	7	DEC 09	12 databases to be removed from STN on December 31, 2004
NEWS	8	DEC 15	MEDLINE update schedule for December 2004
NEWS	9	DEC 17	ELCOM reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	10	DEC 17	COMPUAB reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	11	DEC 17	SOLIDSTATE reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	12	DEC 17	CERAB reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	13	DEC 17	THREE NEW FIELDS ADDED TO IFIPAT/IFIUDB/IFICDB
NEWS	14	DEC 30	EPFULL: New patent full text database to be available on STN
NEWS	15	DEC 30	CAPLUS - PATENT COVERAGE EXPANDED
NEWS	16	JAN 03	No connect-hour charges in EPFULL during January and February 2005
NEWS	17	JAN 11	CA/CAPLUS - Expanded patent coverage to include Russia (Federal Institute of Industrial Property)

NEWS EXPRESS	JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
NEWS WWW	CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

```
  * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 13:27:16 ON 12 JAN 2005

=> file medline biosis embase caplus
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.42       0.42

FILE 'MEDLINE' ENTERED AT 13:28:20 ON 12 JAN 2005

FILE 'BIOSIS' ENTERED AT 13:28:20 ON 12 JAN 2005
Copyright (c) 2005 The Thomson Corporation.

FILE 'EMBASE' ENTERED AT 13:28:20 ON 12 JAN 2005
COPYRIGHT (C) 2005 Elsevier Inc. All rights reserved.

FILE 'CAPLUS' ENTERED AT 13:28:20 ON 12 JAN 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

=> deisher theresa/au
DEISHER IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s deisher theresa/au
L1            1 DEISHER THERESA/AU

=> s conklin darrell/au
L2           29 CONKLIN DARRELL/AU

=> s raymond fenella/au
L3           10 RAYMOND FENELLA/AU

=> s bukowski thomas r/au
L4           22 BUKOWSKI THOMAS R/AU

=> holderman susan d/au
HOLDERMAN IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s holderman susan d/au
L5           14 HOLDERMAN SUSAN D/AU

=> s hansen birgit/au
L6           21 HANSEN BIRGIT/AU

=> s sheppard paul/au
L7           20 SHEPPARD PAUL/AU

=> s fgf (s) homolog (s) polypeptide
L8           10 FGF (S) HOMOLOG (S) POLYPEPTIDE

=> dup rem l8
PROCESSING COMPLETED FOR L8
L9            10 DUP REM L8 (0 DUPLICATES REMOVED)

=> d l9 total ibib kwic
```

L9 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:20323 CAPLUS
DOCUMENT NUMBER: 140:88123
TITLE: Methods for the treatment of inflammatory bowel disease and other inflammatory diseases using FGF-CX and FCTRX growth factors
INVENTOR(S): Boldog, Ferenc L.; Burgess, Catherine E.; Fernandes, Elma R.; Jeffers, Michael E.; Larochelle, William J.; Lichenstein, Henri S.; Peterson, Jeffrey; Prayaga, Sudhirdas K.; Rittman, Beth; Shimkets, Juliette B.; Shimkets, Richard A.; Yang, Meijia
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 153 pp., Cont.-in-part of U.S. Ser. No. 11,364.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2004006015	A1	20040108	US 2002-321962		20021216
US 2003153495	A1	20030814	US 2001-11364		20011116
PRIORITY APPLN. INFO.:			US 2001-11364	A2	20011116
			US 2002-386545P	P	20020606
			US 2000-246206P	P	20001106

AB The present invention is based upon methods of treating inflammatory conditions in the intestinal tract of mammals using growth factor related polypeptides. The invention includes methods of reducing the mortality rate or delaying mortality in a subject suffering from an inflammatory pathol. Methods of using fibroblast growth factor-CX (**FGF**-CX) polynucleotides sequences and the **FGF**-CX **polypeptides** encoded by such nucleic acid sequence, or variants, fragments and **homologs** thereof, are claimed in the invention. Similarly, methods of using FCTRX polynucleotide sequences and the FCTRX polypeptides encoded by such nucleic acid sequences, or variants, fragments and homologs thereof, alone or in combination, are also claimed in the invention. FCTRX collectively refers to any of six variant FCTRX sequences, variously designated FCTR1, FCTR2, FCTR3, FCTR4, FCTR5 and FCTR6.

L9 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:574943 CAPLUS
DOCUMENT NUMBER: 137:135503
TITLE: Treatment of inflammatory bowel disease using growth factors
INVENTOR(S): Jeffers, Michael; Shimkets, Richard A.; Prayaga, Sudhirdas; Boldog, Ferenc L.; Yang, Meijia; Burgess, Catherine E.; Fernandes, Elma R.; Rittman, B.; Shimkets, Juliette B.; Larochelle, William J.; Lichenstein, Henry S.
PATENT ASSIGNEE(S): Curagen Corporation, USA
SOURCE: PCT Int. Appl., 196 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002058716	A2	20020801	WO 2001-US43846	20011106

WO 2002058716 A3 20030731
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
CA 2428084 AA 20020801 CA 2001-2428084 20011106
EP 1365793 A2 20031203 EP 2001-997012 20011106
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
JP 2004537267 T2 20041216 JP 2002-559050 20011106
PRIORITY APPLN. INFO.: US 2000-246206P P 20001106
WO 2001-US43846 W 20011106

AB The present invention is based upon methods of treating inflammatory conditions in the intestinal tract of mammals using growth factor-related polypeptides. Methods of using fibroblast growth factor-CX (**FGF**-CX) polynucleotide sequences and the **FGF**-CX **polypeptides** encoded by such nucleic acid sequences, or variants, fragments and **homologs** thereof, are claimed in the invention. Similarly, methods of using FCTRX polynucleotide sequences and the FCTRX polypeptides encoded by such nucleic acid sequences, or variants, fragments and homologs thereof, alone or in combination, are also claimed in the invention. FCTRX, which have sequence homol. to known growth factors, collectively refers to any of six variant FCTRX sequences, variously designated FCTR1, FCTR2, FCTR3, FCTR4, FCTR5 and FCTR6.

L9 ANSWER 3 OF 10 EMBASE on STN

ACCESSION NUMBER: 2000304684 EMBASE
TITLE: The Fn14 immediate-early response gene is induced during liver regeneration and highly expressed in both human and murine hepatocellular carcinomas.
AUTHOR: Feng S.-L.Y.; Guo Y.; Factor V.M.; Thorgeirsson S.S.; Bell D.W.; Testa J.R.; Peifley K.A.; Winkles J.A.
CORPORATE SOURCE: J.A. Winkles, Department of Vascular Biology, Holland Laboratory, American Red Cross, 15601 Crabbs Branch Way, Rockville, MD 20855, United States. winkles@usa.redcross.org
SOURCE: American Journal of Pathology, (2000) 156/4 (1253-1261). Refs: 44
ISSN: 0002-9440 CODEN: AJPAA4
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 005 General Pathology and Pathological Anatomy
016 Cancer
021 Developmental Biology and Teratology
048 Gastroenterology
LANGUAGE: English
SUMMARY LANGUAGE: English

AB **Polypeptide** growth factors stimulate mammalian cell proliferation by binding to specific cell surface receptors. This interaction triggers numerous biochemical responses including. . . the activation of protein phosphorylation cascades and the enhanced expression of specific genes. We have identified several fibroblast growth factor (**FGF**)-inducible genes in murine NIH 3T3 cells and recently reported that one of them, the **FGF**-inducible 14 (Fn14) immediate-early response gene, is predicted to encode a novel, cell surface-localized type Ia transmembrane protein. Here, we report that the human Fn14 **homolog** is located on chromosome 16p13.3 and encodes a 129-amino

acid protein with .simeq.82% sequence identity to the murine protein. The human Fn14 gene, like the murine Fn14 gene, is expressed at elevated levels after **FGF**, calf serum or phorbol ester treatment of fibroblasts in vitro and is expressed at relatively high levels in heart and. . .

L9 ANSWER 4 OF 10 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation. on STN

ACCESSION NUMBER: 2000:292092 BIOSIS
DOCUMENT NUMBER: PREV200000292092
TITLE: FGF homologs.
AUTHOR(S): Deisher, Theresa A. [Inventor, Reprint author]; Conklin, Darrell C. [Inventor]; Raymond, Fenell [Inventor]; Bukowski, Thomas R. [Inventor]; Holderman, Susan D. [Inventor]; Hansen, Birgit [Inventor]; Sheppard, Paul O. [Inventor]
CORPORATE SOURCE: San Antonio, TX, USA
ASSIGNEE: ZymoGenetics, Inc.
PATENT INFORMATION: US 5989866 November 23, 1999
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Nov. 23, 1999) Vol. 1228, No. 4. e-file. CODEN: OGUPE7. ISSN: 0098-1133.
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 6 Jul 2000
Last Updated on STN: 7 Jan 2002

IT . . .
(Human Medicine, Medical Sciences); Methods and Techniques; Muscular System (Movement and Support); Pharmaceuticals (Pharmacology)
IT Chemicals & Biochemicals
polynucleotide; zFGF-5: **FGF homolog**, cardiovascular agent, muscle cell proliferation agent, **polypeptide**

L9 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:251271 CAPLUS
DOCUMENT NUMBER: 128:304811
TITLE: Cloning and cDNA sequence of human fibroblast growth factor homologous factor zFGF-5
INVENTOR(S): Deisher, Theresa A.; Conklin, Darrell C.; Raymond, Fenella C.; Bukowski, Thomas R.; Holderman, Susan D.; Hansen, Brigit; Sheppard, Paul O.
PATENT ASSIGNEE(S): Zymogenetics, Inc., USA
SOURCE: PCT Int. Appl., 95 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9816644	A1	19980423	WO 1997-US18635	19971016
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2269083	AA	19980423	CA 1997-2269083	19971016
AU 9747583	A1	19980511	AU 1997-47583	19971016
AU 725551	B2	20001012		
EP 931148	A1	19990728	EP 1997-910128	19971016

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

BR 9712348	A	19990831	BR 1997-12348		19971016
CN 1247568	A	20000315	CN 1997-199827		19971016
CN 1127568	B	20031112			
JP 2001502178	T2	20010220	JP 1998-518577		19971016
NO 9901796	A	19990616	NO 1999-1796		19990415
MX 9903530	A	20000131	MX 1999-3530		19990415
KR 2000049207	A	20000725	KR 1999-703306		19990416
PRIORITY APPLN. INFO.:			US 1996-28646P	P	19961016
			WO 1997-US18635	W	19971016

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB A novel DNA sequence is provided that encodes a fibroblast growth factor (**FGF**) **homolog polypeptide** having homol. to **FGF**-8. Anal. of the tissue distribution of the mRNA corresponding to this novel DNA showed that expression was highest in fetal and adult heart tissue, followed by apparent but decreased expression levels in fetal lung, skeletal muscle, smooth muscle tissues such as small intestine, colon, and trachea. The **FGF homolog polypeptide** is designated zFGF-5. The polypeptides, and polynucleotides encoding them, are proliferative for muscle cells and may be used for remodelling cardiac tissue and improving cardiac function. The present invention also includes antibodies to the zFGF-5 polypeptides.

L9 ANSWER 6 OF 10 EMBASE on STN

ACCESSION NUMBER: 1998339230 EMBASE
TITLE: Fibroblast growth factors as multifunctional signaling factors.
AUTHOR: Szebenyi G.; Fallon J.F.
CORPORATE SOURCE: G. Szebenyi, Anatomy Department, University of Wisconsin, Madison, WI 53706, United States
SOURCE: International Review of Cytology, (1998) 185/- (45-106). Refs: 354
ISSN: 0074-7696 CODEN: IRCYAJ
COUNTRY: United States
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 021 Developmental Biology and Teratology
029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English

AB The fibroblast growth factor (**FGF**) family consists of at least 15 structurally related **polypeptide** growth factors. Their expression is controlled at the levels of transcription, mRNA stability, and translation. The bioavailability of **FGFs** is further modulated by posttranslational processing and regulated protein trafficking. **FGFs** bind to receptor tyrosine kinases (FGFRs), heparan sulfate proteoglycans (HSPG), and a cysteine-rich **FGF** receptor (CFR). FGFRs are required for most biological activities of **FGFs**. HSPGs alter **FGF**-FGFR interactions and CFR participates in **FGF** intracellular transport. **FGF** signaling pathways are intricate and are intertwined with insulin-like growth factor, transforming growth factor-β, bone morphogenetic protein, and vertebrate **homologs** of Drosophila wingless activated pathways. **FGFs** are major regulators of embryonic development: They influence the formation of the primary body axis, neural axis, limbs, and other structures. The activities of **FGFs** depend on their coordination of fundamental cellular functions, such as survival, replication, differentiation, adhesion, and motility, through effects on gene. . .

L9 ANSWER 7 OF 10 EMBASE on STN

ACCESSION NUMBER: 95197220 EMBASE
DOCUMENT NUMBER: 1995197220
TITLE: Vascular endothelial growth factor (VEGF) and VEGF receptor 2 (flk-1) are expressed during vasculogenesis and vascular differentiation in the quail embryo.
AUTHOR: Flamme I.; Breier G.; Risau W.
CORPORATE SOURCE: Max-Planck-IPKF, W.G. Kerckhoff Institut, Abteilung Molekulare Zellbiologie,D-61231 Bad Nauheim, Germany
SOURCE: Developmental Biology, (1995) 169/2 (699-712).
ISSN: 0012-1606 CODEN: DEBIAO
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 021 Developmental Biology and Teratology
029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English
AB . . . novo formation of embryonic blood vessels from their angioblastic precursors in situ, is supposed to be under the control of **polypeptide** growth factors and their receptors. The receptor tyrosine kinase flk-1 and its high-affinity ligand vascular endothelial growth factor (VEGF) represent an endothelial specific signal transduction system expressed during embryonic vascular growth in the mouse. We have cloned the quail **homologs** of VEGF and flk-1 using PCR and have investigated their expression pattern in vivo. As shown by Northern analysis and. . . factor (bFGF) and give rise to blood vessels in vitro. Taking advantage of this in vitro model we examined whether **FGF** and VEGF act in concert during vasculogenesis. We found that the flk-1 receptor mRNA is dramatically upregulated within 24 hr upon the addition of **FGF** to quail blastodisc cell cultures. This inducibility in response to EGF is confined to the first 24 hr of culture.. . .

L9 ANSWER 8 OF 10 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 95250605 EMBASE
DOCUMENT NUMBER: 1995250605
TITLE: Retinoic acid induces gene expression of fibroblast growth factor-9 during induction of neuronal differentiation of mouse embryonal carcinoma P19 cells.
AUTHOR: Seo M.; Noguchi K.
CORPORATE SOURCE: Department Biotechnology, Faculty of Engineering, Kyoto Sangyo University, Kamigamo-Motoyama,Kita-ku, Kyoto 603, Japan
SOURCE: FEBS Letters, (1995) 370/3 (231-235).
ISSN: 0014-5793 CODEN: FEBLAL
COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 029 Clinical Biochemistry
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB We have found that the gene expression of the ninth member of the fibroblast growth factor (**FGF**) family, FGF9 was induced during retinoic acid(RA)-induced neuronal differentiation of murine embryonal carcinoma P19 cells. We have reported here the. . . sequence homology to the human FGF9 cDNA and 98.2% homology to that of rats. This mouse FGF9 cDNA encoded a **polypeptide** consisting of 208 amino acids with amino acid sequence identical to that of rats. Only one amino acid was replaced compared to the human **homolog**. The highly conserved sequence homology of FGF9 suggests its functional importance. FGF9 was originally isolated from a culture medium of. . .

L9 ANSWER 9 OF 10 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

ACCESSION NUMBER: 96273172 EMBASE
DOCUMENT NUMBER: 1996273172
TITLE: Pleiotrophin and midkine in normal development and tumor biology.
AUTHOR: Kurtz A.; Schulte A.M.; Wellstein A.
CORPORATE SOURCE: Lombardi Cancer Center, Georgetown University, 3970 Reservoir Road N.W.,Washington, DC 20007, United States
SOURCE: Critical Reviews in Oncogenesis, (1995) 6/2 (151-177). ISSN: 0893-9675 CODEN: CRONEI
COUNTRY: United States
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 001 Anatomy, Anthropology, Embryology and Histology
016 Cancer
021 Developmental Biology and Teratology
029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English

AB Pleiotrophin (PTN) and midkine (MK) are members of a family of developmentally regulated, secreted heparin-binding proteins. The proteins are structural **homologs**, and are highly conserved among species. Although no homology has been detected with other heparin-binding growth factors, their functional similarity to members of the fibroblast growth factor (**FGF**) family is remarkable. PTN and MK are expressed during embryogenesis, showing an expression pattern that suggests functions in neurogenesis, cell. . . The widespread downregulation of PTN and MK in the adult human is reverted in a number of cancers, in which **polypeptides** are able to act as both transforming growth factors and promoters of angiogenesis. Flucidating the molecular mechanisms of PTN and. . .

L9 ANSWER 10 OF 10 EMBASE on STN
ACCESSION NUMBER: 93335452 EMBASE
DOCUMENT NUMBER: 1993335452
TITLE: Murine cortactin is phosphorylated in response to fibroblast growth factor-1 on tyrosine residues late in the G1 phase of the BALB/c 3T3 cell cycle.
AUTHOR: Zhan X.; Hu X.; Hampton B.; Burgess W.H.; Friesel R.; Maciag T.
CORPORATE SOURCE: Dept. of Molecular Biology, Holland Laboratory, American Red Cross, 15601 Crabbs Branch Way,Rockville, MD 20855, United States
SOURCE: Journal of Biological Chemistry, (1993) 268/32 (24427-24431). ISSN: 0021-9258 CODEN: JBCHA3
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English

AB We have previously reported that BALB/c 3T3 cells require a prolonged exposure to fibroblast growth factor (**FGF**)-1 for the stimulation of maximal DNA synthesis, and this event correlates with the tyrosine phosphorylation of novel proteins late in. . . Chemical 268, 9611-9620). We have purified, sequenced, and cloned the cDNA encoding p80/p85 and report that it is the murine **homolog** of the chicken cortactin gene and a member of the human hematopoietic specific-1 gene family. Immunochemical analysis of m- cortactin-tyrosine phosphorylation in response to **FGF**-1 demonstrates a biphasic phosphorylation pattern both as a weak immediate-early and strong mid to late G1 response protein. Because the chicken cortactin gene was originally isolated as a substrate for v-Src, **FGF**-1 may influence the enzymatic activity of other cell-associated tyrosine kinases which utilize p80/p85 (cortactin) as a **polypeptide** substrate.